

presence of *Vireo magister*, *V. ochraceus*, *Centurus rubri-ventris*, and *C. canescens*. *Crotophaga ani* is the only West-Indian representative, and also belongs to Cozumel. It is difficult to account for this northern element, unless it be due to the northerly gales already mentioned. The trade-winds that strike the Bay Islands blow over the widest part of the Caribbean Sea and bring no stragglers from the West Indies.

X.—On the Birds of the Bonin Islands.

By HENRY SEEBOHM, F.Z.S.

THE arrival of a small box of bird-skins from the Bonin Islands makes it possible to clear up some of the difficulties which have surrounded the avifauna of this interesting but neglected group.

Mr. P. A. Holst left Yokohama on the 6th of April, 1889, and spent the greater part of May, June, July, and August on the Bonin Islands, calling at some of the Seven Islands both in going and returning. Collections were made at the following localities :—

Hatchinow-Shima, or Fatsizio Island, about 200 miles south of Yokohama ;

Muco-Shima and Nakondo-Shima, two of the Parry Islands, nearly 600 miles south of Yokohama ;

Chichi-Shima, or Peel Island, about 40 miles further south ;

Haha-Shima, or Hillsborough Island, one of the Coffin Islands or Baily Islands, about 40 miles south of Peel Island.

The Bonin Islands were visited in 1827 by Captain Beechey, during the voyage of the ' Blossom ;' but the zoological discoveries were not published until 1839 (' The Zoology of Captain Beechey's Voyage to the Pacific and Behring's Straits, performed in H.M.S. *Blossom* under the command of Captain F. W. Beechey in the years 1825–28 : ' Ornithology, by N. A. Vigors).

In 1828 they were visited by Baron F. H. von Kittlitz ;

and an unfinished paper, "Ueber die Vögel der Inselgruppe von Boninsima," appeared in the 'Mémoires présentés à l'Académie Impériale des Sciences de St. Pétersbourg par divers Savaus,' 1830, pp. 231-248, which was followed in 1833 by some figures and short text in the third part of Kittlitz's "Kupfertafeln zur Naturgeschichte der Vögel."

For the last sixty years our information respecting the Bonin Islands and its ornithology has been of the most meagre character. In 1854 they were visited by Mr. Stimpson, who found examples of four species on the islands, which are included in a "Catalogue of Birds collected by the United States North Pacific Surveying and Exploring Expedition, in command of Capt. John Rodgers, United States Navy; with notes and descriptions of new species" (Cassin, Proc. Acad. Nat. Sc. Philad. 1862, pp. 312-327).

In 1882 Blakiston and Pryer published a paper on the Birds of Japan in the 'Transactions of the Asiatic Society of Japan' (vol. x. p. 84), in which a few waifs and strays of ornithological information respecting the Bonin Islands occur.

Mr. Holst writes:—"It seemed to me quite solemn when the 'Suruga Maru' cast anchor in 25 fathoms of water at Port Lloyd, on Peel Island, one of the central group of the Bonins, between high rocks and lofty gloomy hills, which shelter the harbour almost on every side. The bay has a circumference of more than three miles, and the mountains are covered with small palm trees and other tropical vegetation. The islanders soon made their appearance in sanpans and canoes, and were most of them half-naked Japanese.

"No bird can be said to be very abundant on Peel Island, but *Hypsipetes squamiceps* is the most so. It is very good eating, and is said to be very fat in the winter. There are a good many Blue Rock-Thrushes (*Monticola solitarius*), but I have only found one kind of Warbler, *Cettia diphone*. I have seen a pair of Buzzards and a Raven, besides some small Sandpipers and a flock of about twenty Gulls. Pigeons are said to be common in winter. There are plenty of a good-sized deer, some weighing as much as 250 lb., and green turtles as large as 400 lb.; also wild goats, wild boars, wild cats, flying foxes, &c.

"During the whole time I have been on Peel Island we have had almost continuous rains, with very few fine days; but the islanders inform me that this is very exceptional, and that their rainy season is October and November. The islanders are the laziest, sleepest, and most disobliging people I have ever met with, and I am tormented with mosquitoes and horse-flies.

"I have visited the Parry Islands, about forty miles north of Peel Island; but we had heavy rain all the time. I have also been to the Baily Islands for a couple of days, where we had the thermometer at 95° in the shade. I have heard of a Sea-Eagle which had come to the north end of Stapleton Island during the last three winters, but it is never seen during summer."

CORVUS MACRORHYNCHUS JAPONENSIS.

Mr. Holst has sent an example of the Japanese race of the Oriental Raven from Peel Island, and one from Nakondo-Shima, an island belonging to the Parry group, about 40 miles further north.

The bill is thick (upper mandible at nostrils .75 inch high), and the general size is large (wing from carpal joint 13½ inches); but Japanese examples are frequently larger. The feathers of the throat are lanceolate, but those of the upper breast are not. The feathers of the mantle are glossed with green and have dark bases. The example from Peel Island has some white on both wings, being apparently a partial albino.

GEOCICHLA TERRESTRIS.

Kittlitz's Ground Thrush was discovered in 1828 on one of the Bonin Islands, and was described under the name of *Turdus terrestris* (Kittlitz, Mém. prés. à l'Acad. St. Pétersb. par divers Savans, 1830, p. 244). The type is in the Museum of the Imperial Academy of Sciences in St. Petersburg; there is a second example in the Vienna Museum, and a third in the Leyden Museum.

Mr. Holst failed to secure specimens of this interesting bird.

MERULA CELÆNOPS.

This well-marked species of Thrush was originally discovered by Mr. Namiye on Miaco-Shima, one of the Seven Islands south of Yokohama, in latitude 34° (Stejneger, Proc. United States Nat. Mus. 1887, p. 484). The types (male and female) are in the Smithsonian Institution in Washington, and no example was known in European collections until I secured one (a male) in the Pryer Collection. Mr. Holst has now sent me a pair (male and female) from Hatchinow-Shima (or Fatsizio Island) in latitude 33° , where he remarks that they are common. This species is very similar to *Merula protomomelæna* (*Turdus dissimilis*, Seebohm, P. Z. S. 1879, p. 805, pl. lxiv.), but differs in having grey instead of orange-chestnut axillaries. The female very closely resembles the female of *Merula chrysolaus*, but the brown of the upper parts is more russet (less olive) and the orange-chestnut of the underparts darker in the island species.

MONTICOLA CYANUS SOLITARIUS.

The Eastern Blue Rock Thrush is a common bird on the Bonin Islands. Mr. Holst has sent me seven adult males, four adult females, and one male in first spring plumage, collected in April and May on Peel Island, together with four eggs from a clutch of five. He has also sent two males and one female, collected in July on the same island, which are in the plumage of birds of the year. A female collected on the 1st of August on Haha-Shima (one of the southern or Baily Group) is in the same plumage. A male obtained on 27th of June on the last-mentioned island, and a female on the 13th of June on Muco-Shima (one of the northern or Parry Group), are young in first plumage.

HYPsipETES SQUAMICEPS.

The Bonin-Island Bulbul was discovered by Kittlitz in 1828, and named by him *Oriolus squamiceps* (Kittlitz, Mém. prés. à l'Acad. Imp. des Sciences de St. Pétersbourg, par divers Savans, 1830, p. 241). Shortly afterwards he identified his species with its Japanese ally, and adopted Temminck's specific name; but no longer believing it to be an

Oriole, and doubting Temminck's assertion that it was a Thrush, he decided that it was a Roller, and called it *Galgulus amaurotis* (Kittlitz, Kupfertafeln zur Naturgeschichte der Vögel, p. 8, pl. xii. fig. 1). From 1832 the two species remained confused together until 1884, when the Bonin-Island Bulbul reappeared in ornithological literature under the name of *Hypsipetes squamiceps* (Meyer, Zeitsch. ges. Orn. i. p. 211).

The acquisition of twelve examples from Chichi-Shima (or Peel Island), Haha-Shima (or Hillsborough Island, one of the Baily Islands), and Nakondo-Shima (one of the Parry Group) enables me to confirm Dr. Meyer's conclusion that the two species differ both in size and colour. Three females vary in length of wing (from carpal joint) from 4·85 to 5·1 inches, and in length of tail from 4·5 to 4·8 inches; whilst eight males vary in length of wing from 5·1 to 5·45 inches, and in length of tail from 4·7 to 5·0 inches. The bill (from frontal feathers) measures in the females ·85 inch, and in the males from ·85 to 1·05 inch. The tarsi of the females measure ·95 inch, and those of the males vary from ·95 to 1·05 inch. The colours of the soft parts are described as follows:—"Bill and tarsi slate-grey; irides light brown." An example of young in first plumage closely resembles the adult, but has the crown uniform brown like the back.

CETTIA DIPHONE.

The Bonin Bush Warbler was originally described under the name of *Sylvia diphone* (Kittlitz, Mém. prés. à l'Acad. des Sciences de St. Pétersb. par divers Savans, 1830, p. 237), from examples obtained from the Bonin Islands in 1828. An imperfect example was described in 1884 as having been obtained by Mr. N. Ota on the Bonin Islands (Blakiston, Amended List of the Birds of Japan, p. 56); and there is an example in the Pryer Collection, probably from the same source.

Mr. Holst has sent three examples from Chichi-Shima (Peel Island) and two from Muco-Shima (one of the Parry Group), collected in May and June.

The Bonin Bush Warbler is very closely allied to *Cettia cantillans*, from which it does not differ in colour.

The examples sent are four males and one young in first plumage. The adults differ from adult examples of *Cettia cantillans* in the following particulars :—

Culmen $\cdot 69$ to $\cdot 7$ inch (instead of $\cdot 5$ to $\cdot 6$ inch), wing from carpal joint $2\cdot 2$ to $2\cdot 3$ inches (instead of $2\cdot 1$ to $2\cdot 28$ inches), tail $2\cdot 46$ to $2\cdot 56$ inches (instead of $2\cdot 0$ to $2\cdot 3$ inches), tarsus $\cdot 93$ to $\cdot 98$ inch (instead of $\cdot 89$ to $\cdot 9$ inch). The length of wing is about the same, but the culmen, tail, and tarsus are longer. There are ten tail-feathers, of which the outer ones are $\cdot 4$ inch shorter than the longest. The relative proportion of the primaries is about the same in both species.

HAPALOPTERON FAMILIARE.

Mr. Holst has sent twelve examples of this curious little Timeline Warbler, which was originally discovered in 1828 on the Bonin Islands, and described under the name of *Ixos familiaris* (Kittlitz, Mém. prés. à l'Acad. Imp. des Sciences de St. Pétersb. par divers Savans, 1830, p. 235). In 1848 it was doubtfully referred to the genus *Iora* (Gray, Gen. B. i. p. 199), and in 1854 the genus *Apalopteron* (scr. *Hapalopteron*) was invented for its reception (Bonaparte, Compt. Rend. xxxix. p. 59). This genus was degraded in 1869 to the rank of a subgenus of *Pycnonotus* (Gray, Hand-list of Birds, i. p. 271), but it is not known that any of these writers ever saw an example.

Until its affinities can be more accurately determined it is probably wisest to allow it to remain in the genus which Bonaparte created for it; but it appears to be not distantly related to *Stachyrhis* (a genus represented in Borneo) and to *Stachyridopsis* (which is represented in Formosa). Mr. Holst has sent examples of male, female, and young, which scarcely differ in plumage. The bill is long, stout, and curved; the tarsus is long, and the feet are stout; the nostrils are covered by an operculum; the rictal bristles are fairly well developed; the scutellation of the tarsus is very obscure; the wings are considerably concave; the first primary is more

than half the length of the second; the second primary is about as long as the secondaries; and the third primary is between the seventh and eighth. The soft parts are described as follows:—"Bill and tarsi black; irides light brown." The upper parts are olive-green and the underparts bright yellow, shading into dull olive on the flanks; there is a ring of white feathers round the eye; forehead black; lores yellow; superciliary stripe black; ear-coverts black anteriorly, yellow posteriorly. The outer webs of the quills are margined with yellow. Tail-feathers twelve, rather pointed, and of nearly equal length. Axillaries, under wing-coverts, and inner margin of quills pale yellow. Wing from carpal joint 2·7 to 2·6 inches; tail 2·4 to 2·25 inches; culmen ·74 to ·65 inch; tarsus 1·0 to ·9 inch. The dates are 13th of June to 2nd of August, and the localities Muco-Shima and Nakondo-Shima (two of the Parry Islands) and Haha-Shima (one of the Baily Islands).

FRINGILLA KITTLITZI, sp. nov.

The Bonin Island Greenfinch was discovered by Kittlitz in 1828, but was not regarded by its discoverer as distinct from the European species. It most nearly resembles *Fringilla sinica* in size, agreeing with that species and with *F. kawarahiba* (and differing from the European species) in having the bases of the secondaries yellow on both webs. It has much less yellow at the base of the tail-feathers than any of its allies, and less on the inner webs of the quills than the other two eastern species. The crown and nape of *F. sinica* are grey, those of *F. kawarahiba* brown, and those of *F. kittlitzii* olive.

Mr. Holst has sent three examples from Nakondo-Shima (one of the Parry Islands), and two from Haha-Shima (one of the Baily Islands).

FRINGILLA MONTIFRINGILLA.

A single example of the Common Brambling was caught on the steamer about thirty miles north of the Bonin Islands early in April. This species is a common winter visitor to all of the Japanese Islands, occasionally wandering as far south as the Loo-Choo Islands.

CHAUNOPROCTUS FERREIROSTRIS.

The Bonin Grosbeak was discovered in 1827 on one of the Bonin Islands, during the voyage of the 'Blossom,' and was originally described without any record of the locality whence it was procured (Vigors, Zool. Journ. 1828, p. 354); the types are now in the British Museum. It was rediscovered a year later, and redescribed as *Fringilla papa* (Kittlitz, Mém. présentés à l'Acad. Imp. des Sciences de St. Pétersb. par divers Savans, 1830, p. 239). It is figured in Bonaparte and Schlegel's 'Loxiens,' pls. 37, 38 (p. 32), as *Chaunoproctus papa*.

Mr. Holst did not succeed in obtaining this curious species, but he heard that it was to be found on the Baily Islands.

HIRUNDO RUSTICA GUTTURALIS.

An example of the Eastern race of the Common Barn Swallow is dated the 3rd of May from Peel Island, and is described as one out of two, which were seen for one day only on their spring migration. This bird is a common summer visitor to Japan.

BUTEO VULGARIS PLUMIPES.

Mr. Holst has sent four examples of the Eastern race of the Common Buzzard from Peel Island, not far from the centre of the Bonin group. Two of these examples are young, with barred tail-feathers, and the other two do not appear to be very old, as there are traces of bars on several of the tail-feathers. In all the examples the tarsi are feathered for more than half their length.

CARPOPHAGA IANTHINA.

The Japanese Fruit Pigeon was procured by Kittlitz on the Bonin Islands in 1828. One of his examples is in the Senckenberg Museum in Frankfort, and a second is in the Museum of the Imperial Academy of Sciences in St. Petersburg. The latter has been made the type of a new species, *Ianthænas nitens* (Stejneger, Proc. United States Nat. Mus. 1887, p. 421), on the ground that the head is brown instead of slate-grey; but as this is not the case with the Frankfort

specimen, it is probable that the difference is due to abrasion. Mr. Holst did not procure this bird on the Bonin Islands, though he saw a Pigeon on Peel Island and obtained its eggs, but he has sent an example from Hatchinow-Shima (Fatsizio Island), which does not differ from Japanese specimens.

CARPOPHAGA VERSICOLOR.

The Bonin Fruit Pigeon was discovered on one of the Bonin group of islands in 1827 by Captain Beechey during the voyage of the 'Blossom,' and was named *Columba metallica* (Vigors, Zool. Captain Beechey's Voyage, p. 25). In consequence of most unreasonable delay in the completion of the part relating to the Mollusca the results of the voyage were not published until 1839. In the meantime two events happened which made the use of this name impossible. In 1828 F. H. von Kittlitz spent a fortnight on the Bonin Islands and also discovered the Fruit Pigeon which is peculiar to them, and described and figured it in 1832 under the name of *Columba versicolor* (Kittlitz, Kupfertafeln zur Naturgeschichte der Vögel, p. 5, pl. v. fig. 2). Not only was Vigors's name thus antedated by that of Kittlitz in consequence of the provoking delay, but it was otherwise, and, so far as appears, quite independently applied to another species of Fruit Pigeon from the Island of Timor (Temminck, Planches Coloriées, no. 562) in 1835. In the same year the Bonin species was named *Columba kittlitzii* (Temminck, Planches Coloriées, page following text to no. 578).

Kittlitz's type of this handsome bird is in the St. Petersburg Museum, and there is a duplicate in the Senckenberg Museum in Frankfort, but Vigors's type appears to have been lost. Mr. Holst has obtained for me a male from Nakondo-Shima, one of the Parry Group of the Bonin Islands. It is dated the 15th of September, and is moulting both its primaries and its rectrices. The soft parts are described as follows:—"Bill greenish yellow; tarsi dark red; irides dark blue."

Carpophaga versicolor can never be confused with its Japanese ally. It is a much larger and much paler bird,

measuring from one to two inches longer in the wing, and an inch longer in the tail. The bronze on the wing-coverts is green in all positions, and the ground-colour of the underparts is lavender instead of dark bluish grey.

CHARADRIUS FULVUS.

The Asiatic Golden Plover was found on one of the Bonin Islands by Captain Rodgers (Cassin, Proc. Acad. Nat. Sc. Philad. 1862, p. 321), doubtless on migration.

TOTANUS INCANUS.

An example of the American Wandering Tattler was procured by Mr. Holst on Peel Island on the 11th of May. The whole of the underparts are barred, the nasal groove extends for two thirds of the length of the bill, and the back of the tarsus is very imperfectly scutellated. It is sexed a female. Wing from carpal joint 6·9 inches. The soft parts are described as follows :—" Bill slate-grey ; tarsi yellow ; irides light brown." It appears to be a fully adult bird, doubtless on its way north to breed.

TOTANUS INCANUS BREVIPES.

An example of the Asiatic Wandering Tattler was procured on Peel Island on the 1st of June. The belly is nearly all unspotted white ; the nasal groove only extends along half the length of the bill ; and the scutellations at the back of the tarsus are very perfect. It is sexed a male. Wing from carpal joint 6·2 inches. It is described as being very shy ; it was in the company of a mate which was not procured. From the barring on its upper tail-coverts and the traces of pale margins on many of the feathers of the upper parts, I take it to be a bird of the previous year.

It was probably an example of this race which was procured by Captain Rodgers on one of the Bonin Islands (Cassin, Proc. Acad. Nat. Sc. Philad. 1862, p. 109).

TOTANUS HYPOLEUCUS.

The Common Sandpiper was procured on one of the Bonin Islands by Captain Rodgers (Cassin, Proc. Acad. Nat. Sc. Philad. 1862, p. 322), and was recorded under the name of

Tringoides empusa. Mr. Holst obtained an example on Peel Island on the 11th of July.

LARUS CACHINNANS.

An immature example of a large Gull procured by Mr. Holst on Peel Island appears to belong to Pallas's Herring Gull. It was one of a party of perhaps twenty birds, which disappeared shortly after his arrival in April.

DIOMEDEA ALBATRUS.

There are five eggs of Steller's Albatros in the Pryer Collection, which are labelled as having come from the Bonin Islands. They vary in size from 4·7 by 2·9 inches to 4·3 by 3·0 inches. They are creamy white, profusely speckled with russet at the large end.

Steller's Albatros was discovered by the illustrious traveller whose name it bears on the coast of Kamtschatka, and was described in 1780 (Pallas, *Spicilegia Zoologica*, pt. v. p. 28). It is a common species in the Japanese seas, and is generally found in company with a dark form, which has been regarded by some ornithologists as the young. Others have described it as specifically distinct; but it seems probable that the two forms represent a dimorphic species, like *Fulmarus glacialis*, *Stercorarius pomarinus*, *Stercorarius richardsoni*, *Ardea jugularis*, &c. The dark form was figured on plate 963 of the 'Planches Enluminées' of D'Aubenton under the title of L'Albatros de la Chine. Upon this plate the name of *Diomedea chinensis* was founded in 1820 (Temminck, *Man. d'Orn.* i. preface, page cx); but its author appears to have changed his mind in 1828, and renamed it *Diomedea brachyura* (Temminck, *Planches Coloriées*, Genus *Diomedea*, 75th livraison). It was afterwards rediscovered and redescribed under the name of *Diomedea derogata* (Swinhoe, *Proc. Zool. Soc.* 1873, p. 786).

CESTRELATA HYPOLEUCA.

Some years ago I received a few birds from Mr. Snow, of Yokohama, which had been collected on Krusenstern Island in the North Pacific Ocean. Amongst these was the skin of a small Petrel, which I gave to the British Museum

along with the rest of my Tubinares when that group was being arranged by Mr. Salvin. This skin is the type of *Æstrelata hypoleuca* (Salvin, Ibis, 1888, p. 359), and remained unique until I received an adult and young from Mr. Holst. The soft parts of the adult are described as follows:—"Tarsi bluish pink; bill black; irides dark brown; pupil blue." These skins were obtained on the 16th of June on Nakondo-Shima, one of the Parry group of the Bonin Islands. The young bird is moulting from its downy stage into the adult plumage, and appears not to have left the nest.

NYCTICORAX CRASSIROSTRIS.

Mr. Holst has been fortunate enough to procure an example of this much disputed species. It is a female with very short crest, and was obtained on Nakondo-Shima, one of the Parry Islands, on the 15th of June.

The Bonin Night Heron was originally discovered by Captain Beechey during the voyage of the 'Blossom' in 1827, but was not named until 1839 (Vigors, Zool. Captain Beechey's Voyage, p. 27). In the meantime it was rediscovered in 1828, and identified, in 1833, with *Ardea caledonica* (Kittlitz, Kupfertafeln zur Naturgeschichte der Vögel, pt. iii. p. 27). Vigors's type was once in the Museum of the Zoological Society, and was transferred to the British Museum, where it now is, all assertions to the contrary (Walden, Trans. Zool. Soc. ix. p. 238) notwithstanding.

The Bonin Night Heron is vinous grey above and white below; the head and crest are black, and the occipital plumes, what there is left of them, appear to have been white. The superciliary streak is white, and the axillaries are white. The soft parts are described as follows:—"Tarsi light yellow, with greenish scales in front; bill black, greenish yellow at base; irides light yellow." Wing from carpal joint 11 inches; tail 4·3 inches; bill, from frontal feathers, 2·8 inches; tarsus 3·3 inches; middle toe with claw 3 inches; height of bill at nostrils ·9 inch.

It appears to be quite distinct from *Nycticorax manillensis*, which has reddish axillaries and a rufous superciliary streak;

but it only differs from *Nycticorax caledonica* in having the bill slightly stouter, measuring from 1 to '9 (instead of from '9 to '8) inch at the base of the nostrils.

SULA LEUCOGASTRA.

The Common Booby was procured on the Bonin Islands by Mr. Stimpson in 1854 (Cassin, Proc. Acad. Nat. Sc. Philad. 1862, p. 325), and has already been recorded as breeding on these islands (Blakiston and Pryer, Trans. As. Soc. Japan, 1882, p. 102). Mr. Holst has sent an adult male and an adult female from Peel Island, obtained on the 11th of May. He states that this species is common on the lonely islands, especially on Long Island or Minam-Shima, whence he has sent an egg. The egg measures 2·5 by 1·6 inches, and is greenish white with very little superfluous chalk on the surface. The colours of the soft parts of the birds are not given, but the bill appears to be pale yellow, and the feet yellowish green.

PHAETON RUBRICAUDA.

Mr. Holst writes that there is a bunch of the tail-feathers of the Red-tailed Tropic-bird in the Tokio Museum labelled Bonin Islands. I have a skin which was procured by Mr. Snow in the spring of 1883 on Krusenstern Island, about forty degrees to the east of the Bonin Islands. Mr. Holst was told that a white bird with red tail was common at certain seasons on the Parry Islands.

Thus the Bonin Islands appear to have derived their resident birds from various sources. After the winter visitors have been eliminated there remain only 15 residents. Of these, *Diomedea albatrus*, *Æstrelata hypoleuca*, *Sula leucogastra*, and *Phaeton rubricauda* are ocean-birds with ranges of considerable extent, leaving only 11 resident land-birds. Of these *Corvus japonensis*, *Monticola solitarius*, and *Buteo plumipes* are Japanese birds, leaving the following eight species peculiar to the Bonin Islands:—

1. *Geocichla terrestris*, which is not very nearly allied to any other species, but is probably connected with *G. sibirica*.

2. *Hypsipetes squamiceps*, which is doubtfully distinct from *H. pryeri* of the Loo-Choo Islands.

3. *Cettia diphone*, which has its nearest ally in *C. cantillans* from Japan.

4. *Haplopteron familiare*, which may be allied either to a species from Formosa or the Malay Archipelago.

5. *Fringilla kittlitzi*, which is most nearly allied to *F. kawarabiba* from Japan.

6. *Chaunoproctus ferreirostris*, which may be an ally of *Coccothraustes personatus* changed in colour, or of *Loxia enucleator*, which has changed the size of its bill.

7. *Carpophaga versicolor*, which may be an offshoot of *C. ianthina* from Japan, or of *C. griseigularis* from the Philippine Islands.

8. *Nycticorax crassirostris*, which is doubtfully distinct from *N. caledonica* of Australia.

XI.—Notices of recent Ornithological Publications.

1. Aitchison on the Zoology of the Afghan Border.

[The Zoology of the Afghan Delimitation Commission. By J. E. T. Aitchison, M.D., C.I.E., F.R.S., F.L.S. Trans. Linn. Soc. 2nd ser. Zool. v. pt. 3. London: May, 1889.]

The authorities objected to have more than one Naturalist attached to the Afghan Delimitation Commission. Consequently Dr. Aitchison, whose "special calling is that of a Botanist," had to undertake the zoological work also, and being unprovided with proper assistants and not able to induce the natives to collect for him, did not make such extensive collections as might well have been formed in the interesting district explored and under the favourable circumstances of the expedition.

In his summary of the results Dr. Aitchison tells us that specimens of 123 species of birds were obtained, and 14 others were recognized. "Amongst these there are only three new species, namely, a Woodpecker (*Gecinus gorii*, Hargitt), a Sparrow (*Passer yatii*, Sharpe), and a Pheasant